



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/538,894

06/14/2005

Joachim Berthold

FR 6082 (US)

5148

34872

7590

07/14/2008

Basell USA Inc.

Delaware Corporate Center II

2 Righter Parkway, Suite #300

Wilmington, DE 19803

EXAMINER

HEINCER, LIAM J

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

07/14/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,894	<b>Applicant(s)</b> BERTHOLD ET AL.	
	<b>Examiner</b> Liam J. Heincer	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/2007</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriguchi et al. (US Pat. 4,536,550) as evidenced by DeChellis et al. (US Pat. 5,405,922).

Considering Claim 1: Moriguchi et al. teaches a polyethylene composition with multimodal molecular mass distribution, with a density of from 0.935 to 0.965 g/cm<sup>3</sup> (9:66-10:1) with specific examples of 0.956 and 0.949 (Tables 2 and 3) and MFR in the range of 0.5 to 3.0 dg/min (10:3-5) and which comprises 35 to 45% by weight (Table 2) of a low molecular mass (2:59-60) polyethylene polymer A (2:52-56); from 34 to 44% by weight (Table 2) of a high molecular mass (3:28-29) copolymer B made from ethylene and a first 1-olefin comonomer having from 4 to 8 carbons (2:52-58); and from 18 to

26% (Table 2) by weight of an ultrahigh molecular mass (3:8-10) copolymer C containing a second 1-olefin comonomer (2:52-58).

Moriguchi et al. does not the claimed amount of comonomer in the high and ultrahigh molecular weight polymers. However, generally differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is a showing that the concentration is critical. See MPEP 2144.05. It would have been obvious to a person having ordinary skill in the art at the time of invention to have optimized the amount of each comonomer through routine optimization, and the motivation to do so would have been, as DeChellis et al. suggest, to control the density of the ethylene copolymer (5:45-53).

Considering Claim 3: Moriguchi et al. teaches the 1-olefin comonomers as being 1-butene, 1-hexene, 1-pentene, 1-octene or 4-methyl-1-pentene (2:56-58).

Considering Claim 4: The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. the viscosity number would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Considering Claim 5: Moriguchi et al. teaches an impact strength in the range of 60 to 90 kJ/m<sup>2</sup> (Table 3).

The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. the swell ratio, and stress crack resistance would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure

that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berthold et al. (US Pat. 6,713,561) as evidenced by DeChellis et al. (US Pat. 5,405,922).

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Considering Claim 1: Berthold et al. teaches a polyethylene composition with multimodal molecular mass distribution (1:11-13) which has a density in the range of from 0.952-0.954 at 23 °C (Table 1) an MRF in the range of from 2.0 to 3.5 dg/min (Table 1) and which comprises from 30 to 60% by weight of a low-molecular-mass ethylene homopolymer (2:14-17); from 30 to 65% by weight of a high-molecular-mass copolymer made from ethylene and a 1-olefin comonomer having from 4 to 8 carbon atoms (2:17-19); and from 1 to 30% by weight of ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer (2:19-21). Berthold et al. also teaches the first 1-olefin comonomer as being present at less than up to 5% by weight (2:30-34) and the second 1-olefin as being present in an amount 0 to 10% by weight (2:35-39).

Berthold et al. does not teach the narrow ranges of the polymer amounts. However, generally differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is a showing that the concentration is critical. See MPEP 2144.05. It would have been obvious to a person having ordinary skill in the art at the time of invention to have optimized the amount of each polymer through routine optimization, and the motivation to do so would have been, as Berthold et al. suggests, to optimize the ratio of stiffness to stress cracking and swelling rate of the composition (2:3-11).

Berthold et al. does not the narrow amounts of comonomer in the high and ultrahigh molecular weight polymers. However, generally differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is a showing that the concentration is critical. See MPEP 2144.05. It would have been obvious to a person having ordinary skill in the art at the time of invention to have optimized the amount of each comonomer through routine optimization, and the motivation to do so would have been, as DeChellis et al. suggest, to control the density of the ethylene copolymer (5:45-53).

Considering Claim 3: Berthold et al. teaches the 1-olefins as being 1-butene, 1-hexene, 1-pentene, 1-octene or 4-methyl-1-pentene (2:34-35).

Considering Claim 4: The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. the viscosity number would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Considering Claim 5: Berthold et al. teaches the swell ratio as being from 180 to 220% (Table 1), and the stress-crack resistance as being in the range of 15 to 25 hours (Table 1).

The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. the notched impact strength, would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berthold et al. (WO 01/23446) as evidenced by DeChellis et al. (US Pat. 5,405,922). Note: US Pat. 6,713,561 is being used as an English language equivalent of WO 01/23446 and all references will be to this document.

Considering Claim 1: Berthold et al. teaches a polyethylene composition with multimodal molecular mass distribution (1:11-13) which has a density in the range of from 0.952-0.954 at 23 °C (Table 1) an MRF in the range of from 2.0 to 3.5 dg/min (Table 1) and which comprises from 30 to 60% by weight of a low-molecular-mass ethylene homopolymer (2:14-17); from 30 to 65% by weight of a high-molecular-mass copolymer made from ethylene and a 1-olefin comonomer having from 4 to 8 carbon atoms (2:17-19); and from 1 to 30% by weight of ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer (2:19-21). Berthold et al. also teaches the first 1-olefin comonomer as being present at less than up to 5% by weight (2:30-34) and the second 1-olefin as being present in an amount 0 to 10% by weight (2:35-39).

Berthold et al. does not teach the narrow ranges of the polymer amounts. However, generally differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is a showing that the concentration is critical. See MPEP 2144.05. It would have been obvious to a person having ordinary skill in the art at the time of invention to have optimized the amount of each polymer through routine optimization, and the motivation to do so would have been, as Berthold

et al. suggests, to optimize the ratio of stiffness to stress cracking and swelling rate of the composition (2:3-11).

Berthold et al. does not the narrow amounts of comonomer in the high and ultrahigh molecular weight polymers. However, generally differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is a showing that the concentration is critical. See MPEP 2144.05. It would have been obvious to a person having ordinary skill in the art at the time of invention to have optimized the amount of each comonomer through routine optimization, and the motivation to do so would have been, as DeChellis et al. suggest, to control the density of the ethylene copolymer (5:45-53).

Considering Claim 3: Berthold et al. teaches the 1-olefins as being 1-butene, 1-hexene, 1-pentene, 1-octene or 4-methyl-1-pentene (2:34-35).

Considering Claim 4: The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. the viscosity number would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Considering Claim 5: Berthold et al. teaches the swell ratio as being from 180 to 220% (Table 1), and the stress-crack resistance as being in the range of 15 to 25 hours (Table 1).

The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. the notched impact strength, would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would



be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 3-5 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, and 5-8 of U.S. Patent No. 6,713,561. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Art Unit: 1796

Considering Claim 1: Claim 1 of Patent '561 teaches a polyethylene composition with multimodal molecular mass distribution which has a density in the range of greater than 0.940 at 23 °C an MRF in the range of from 0.1 to 10 dg/min and which comprises from 30 to 60% by weight of a low-molecular-mass ethylene homopolymer; from 30 to 65% by weight of a high-molecular-mass copolymer made from ethylene and a 1-olefin comonomer having from 4 to 8 carbon atoms; and from 1 to 30% by weight of ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer (Claim 1).

Claim 1 of Patent '561 does not teach the narrow ranges of the polymer amounts. However, generally differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is a showing that the concentration is critical. See MPEP 2144.05. It would have been obvious to a person having ordinary skill in the art at the time of invention to have optimized the amount of each polymer through routine optimization, as well as the density and melt flow, and the motivation to do so would have been, as Berthold et al. suggests, to optimize the ratio of stiffness to stress cracking and swelling rate of the composition (2:3-11).

Claim 1 of Patent '561 does not the narrow amounts of comonomer in the high and ultrahigh molecular weight polymers. However, generally differences in concentration will not support patentability of subject matter encompassed by the prior art unless there is a showing that the concentration is critical. See MPEP 2144.05. It would have been obvious to a person having ordinary skill in the art at the time of invention to have optimized the amount of each comonomer through routine optimization, and the motivation to do so would have been, as DeChellis et al. suggest, to control the density of the ethylene copolymer (5:45-53).

Considering Claim 3: Claim 7 of Patent '561 teaches the 1-olefins as being 1-butene, 1-hexene, 1-pentene, 1-octene or 4-methyl-1-pentene (claim 7).

Considering Claim 4: Claim / of Patent '561 teaches the viscosity number as being from 500 to 600 cm<sup>3</sup>/g (claim 8).

Considering Claim 5: Claim 1 of Patent '561 teaches the composition of claim 1.

The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. the notched impact strength, swell ratio, and stress-crack resistance, would implicitly be achieved by a composition with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Claims 1 and 3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application No. 10/537,728. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Considering Claim 1: Claim 2 of application '728 teaches a polyethylene composition with multimodal molecular mass distribution which has a density in the range of from 0.955 to 0.960 at 23 °C an MRF in the range of from 0.8 to 1.6 dg/min and which comprises from 45 to 55% by weight of a low-molecular-mass ethylene homopolymer; from 20 to 35% by weight of a high-molecular-mass copolymer made from ethylene and a 1-olefin comonomer having from 4 to 8 carbon atoms; and from 20 to 30% by weight of ultrahigh-molecular-mass ethylene copolymer C containing a second 1-olefin comonomer (Claim 1). Claim 2 of application '728 also teaches the first 1-olefin comonomer as being present at 0.1 to 0.6% by weight and the second 1-olefin as being present in an amount 0.5 to 2.5% by weight (claim 2). Although claim 2 of application '728 does not teach the claimed ranges exactly, it does teach overlapping ranges with the instant claims. When the prior art ranges and the instant ranges overlap, a prima facie case of obviousness exists. See MPEP § 2144.05.

Considering Claim 3: Claim 3 of application '728 teaches the 1-olefins as being 1-butene, 1-hexene, 1-pentene, 1-octene or 4-methyl-1-pentene (claim 3).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Response to Arguments***

Applicant's arguments, see pages 2-3, filed April 4, 2008, with respect to the objection of claim 1 have been fully considered and are persuasive. The objection of claim 1 has been withdrawn.

Applicant's arguments, see pages 6-12, filed April 4, 2008, with respect to the rejection(s) of claim(s) 1-5 under U.S.C. 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Berthold et al. and DeChellis et al.

Applicant's arguments with respect to claims 1 and 3-5 under nonstatutory obviousness-type double patenting have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed April 4, 2008 have been fully considered but they are not persuasive.

A) Applicant's argument of unexpected results is not persuasive. Applicant has merely made an allegation of unexpected results, without evidence of the unexpected nature of the result. Additionally, a result must be shown to be unexpected in order to overcome a rejection, not merely superior. There is nothing of record to show that the results of the optimization of the ranges is unexpected.

B) In response to applicant's argument that Moriguchi et al. and DeChellis et al. use different catalyst, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references

would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant instance, Dechellis et al. teaches how the amount of the second olefin affects the density of the resin.

C) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liam J. Heincer whose telephone number is 571-270-3297. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MARK EASHOO, PhD./

LJH

Supervisory Patent Examiner, Art Unit 1796

June 20, 2008

3-Jul-08